

STATEMENT CLAIMING SMALL ENTITY STATUS  
(37 CFR 1.27(a))-NONPROFIT ORGANIZATION

DOCKET NUMBER: 0050.2055-001



Applicant or Patentee: Frederick G. Walther, Jeffrey M. Roth, William E. Keicher, and Alan E. DeCew  
Application or Patent No.: 10/603,071  
Filed or Issued: June 24, 2003  
Title: Wavelength Division and Polarization Division Multiple Access Free Space Optical Terminal Using a Single Aperture

I hereby state that I am an official empowered to act on behalf of the nonprofit organization identified below:

NAME OF NONPROFIT ORGANIZATION Massachusetts Institute of Technology  
ADDRESS OF NONPROFIT ORGANIZATION 77 Massachusetts Avenue  
Cambridge, Massachusetts 02139

TYPE OF NONPROFIT ORGANIZATION:

- ☒ UNIVERSITY OR OTHER INSTITUTION OF HIGHER EDUCATION  
☐ TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE (26 U.S.C.501(a) and 501(c)(3))  
☐ NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF STATE OF THE UNITED STATES OF AMERICA  
(NAME OF STATE \_\_\_\_\_)  
(CITATION OF STATUTE \_\_\_\_\_)  
☐ WOULD QUALIFY AS TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE (26 U.S.C. 501(a) and 501(c)(3)) IF  
LOCATED IN THE UNITED STATES OF AMERICA  
☐ WOULD QUALIFY AS NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF STATE OF THE UNITED  
STATES OF AMERICA IF LOCATED IN THE UNITED STATES OF AMERICA  
(NAME OF STATE \_\_\_\_\_)  
(CITATION OF STATUTE \_\_\_\_\_)

I hereby state that the nonprofit organization identified above qualifies as a nonprofit organization as defined in 37 CFR 1.27(a)(3) for purposes of paying reduced fees to the United States Patent and Trademark Office regarding the invention described in:

- ☐ the specification filed herewith with title as listed above.  
☒ the application identified above.  
☐ the patent identified above.

I hereby state that the rights under contract or law have been conveyed to and remain with the nonprofit organization regarding the above identified invention. If the rights held by the nonprofit organization are not exclusive, each individual, concern, or organization having rights in the invention must file separate statements as to their status as small entities. No rights to the invention are held by any person who would not qualify as a person under 37 CFR 1.27(a)(1) or by any concern which would not qualify as a small business concern under 37 CFR 1.27(a)(2) or a nonprofit organization under 37 CFR 1.27(a)(3).

Each person, concern, or organization having any rights in the invention is listed below:

- ☒ no such person, concern, or organization exists.  
☐ each such person, concern, or organization is listed below.

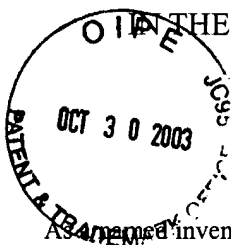
I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.27(g)(2))

NAME OF PERSON SIGNING Rita M. Filipowicz

TITLE IN ORGANIZATION OF PERSON SIGNING Patent Administrator

ADDRESS OF PERSON SIGNING 5 Cambridge Center, Kendall Square, Room NE25-230, Cambridge, MA 02142-1493

SIGNATURE  DATE 8/5/03



## THE UNITED STATES PATENT AND TRADEMARK OFFICE

Declaration for Patent Application

[ ] Supplemental (37 C.F.R. §1.67)

As an inventor, I hereby declare that:

My residence, mailing address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 2 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled

Wavelength Division and Polarization Division Multiple Access Free Space Optical Terminal

Using a Single Aperture

the specification of which (check one)

[ ] is attached hereto.

[X] was filed on June 24, 2003 as United States Application Number 10/603,071.

[ ] was filed on [PCT Filing Date] as PCT International Application No. [PCT Appl'n No.] [OPTION and assigned United States Application No. [ ]].

[ ] and was amended on [ ] (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. §1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119 or 365 of any foreign application(s) for patent or inventor's certificate, or of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed:

<u>Prior Foreign Application(s)</u>			Priority Not Claimed	Certified Copy Filed?	
				YES	NO
_____ (Number)	_____ (Country)	_____ (Day/Month/Year filed)	[ ]	[ ]	[ ]
_____ (Number)	_____ (Country)	_____ (Day/Month/Year filed)	[ ]	[ ]	[ ]
_____ (Number)	_____ (Country)	_____ (Day/Month/Year filed)	[ ]	[ ]	[ ]

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole

For first inventor Frederick G. Walther

Inventor's Signature *Frederick G. Walther* Date 15 AUG 03

Residence 12 Sheffield Road

Winchester, MA 01890

Citizenship USA

Mailing Address same as above

Full name of second joint

inventor, if any Jeffrey M. Roth

Inventor's Signature *Jeffrey M. Roth* Date 15 Aug 03

Residence 49 40 Sunset Road

Arlington, MA 02474

Citizenship USA

Mailing Address same as above

Full name of third joint

inventor, if any William E. Keicher

Inventor's Signature *William E. Keicher* Date 15 AUGUST 2003

Residence 6 Winn Valley Drive

Burlington, MA 01803

Citizenship USA

Mailing Address same as above

Full name of fourth joint

inventor, if any Alan E. DeCew

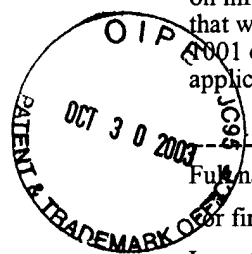
Inventor's Signature *Alan E. DeCew* Date 3 Sept 03

Residence 260 Chesnut Street

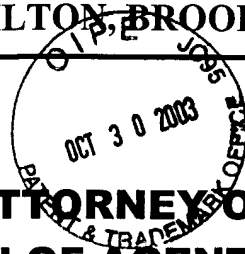
W. Newton, MA 02465

Citizenship USA

Mailing Address same as above



# HAMILTON, BROOK, SMITH & REYNOLDS, P.C.



## POWER OF ATTORNEY OR AUTHORIZATION OF AGENT AND CORRESPONDENCE ADDRESS

Application Number	10/603,071
Filing Date	June 24, 2003
First Named Inventor	Frederick G. Walther
Confirmation Number	8598
Group Art Unit	2874
Examiner Name	Not yet assigned
Attorney Docket Number	0050.2055-001

Title	Wavelength Division and Polarization Division Multiple Access Free Space Optical Terminal Using a Single Aperture
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I/We hereby appoint

☒ the attorneys/agents associated with **Customer No. 021005**

☐ Practitioner(s) named below:

as my/our attorneys/agents to prosecute the application identified above, including any continuation or divisional applications thereof, and to transact all business in the United States Patent and Trademark Office connected therewith.

The correspondence address for the above-identified application is:

☒ Customer Number 021005

Hamilton, Brook, Smith & Reynolds, P.C.

530 Virginia Road

P.O. Box 9133

Concord, Massachusetts 01742-9133

☐ Other \_\_\_\_\_

Please direct all telephone calls and facsimiles to:

Name James M. Smith, Esq. Tel. No. 978-341-0036 Fax No. 978-341-0136

I am the:

☐ Applicant/Inventor.

☒ Authorized representative of the Assignee, **Massachusetts Institute of Technology**, of the entire interest. See 37 C.F.R. § 3.71. A Statement under 37 C.F.R. §3.73(b) is enclosed.

☐ Authorized representative of the Assignee, [ ], together with [ ], of the entire interest. A Statement under 37 C.F.R. § 3.73(b) is enclosed.

### SIGNATURE of Applicant or Assignee of Record

Name & Title	Rita M. Filipowicz, Patent Administrator
Signature	
Date	10/7/03



Docket No. 0050.2055-001

STATEMENT UNDER 37 C.F.R. § 3.73(b)

Applicants: Frederick G. Walther, Jeffrey M. Roth, William E. Keicher, and Alan E. DeCew

Application No.: 10/603,071 Filed: June 24, 2003

For: Wavelength Division and Polarization Division Multiple Access Free Space Optical Terminal Using a Single Aperture

Massachusetts Institute of Technology, a university,  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is

- A. ☒ the assignee of the entire right, title and interest in the patent application identified above; or
- B. ☐ an assignee together with ☐ of the entire right, title and interest in the patent application identified above.

The right, title and interest of the above-named assignee in the patent application identified above is established by virtue of:

- A. ☒ An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s) of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Date: 10/7/03

Name: Rita M. Filipowicz

Title: Patent Administrator

Signature: *Rita M. Filipowicz*

ASSIGNMENT**COPY**Joint

WHEREAS, we, **Frederick G. Walther, Jeffrey M. Roth, William E. Keicher, and Alan E. DeCew**, have invented a certain improvement in **Wavelength Division and Polarization Division Multiple Access Free Space Optical Terminal Using a Single Aperture** described in an application for Letters Patent of the United States,

- ☐ the specification of which is being executed on even date herewith and is about to be filed in the United States Patent Office (*use for 37 CFR §1.53(b) filings only*);
- ☒ the specification of which was filed on **June 24, 2003** as United States Application No. **10/603,071**;
- ☐ the specification of which is the United States National Stage of International Application No. **[PCT Appl'n No.]**, filed on **[PCT Filing Date]** **[OPTION and assigned United States Application No. [ ]]** (*use for 35 USC §371 filings only*);
- ☐ which was patented under United States Patent No. [ ] on [ ].

WHEREAS, **Massachusetts Institute of Technology** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the **Commonwealth of Massachusetts**, and having a usual place of business at **77 Massachusetts Avenue, Cambridge, Massachusetts 02139**, desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts

which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor's Signature: \_\_\_\_\_



Frederick G. Walther

State/Commonwealth \_\_\_\_\_

of MASSACHUSETTS

County of MIDDLESEX

Then personally appeared before me the above-named **Frederick G. Walther** and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 15th day of AUGUST, 2003.

(SEAL)



Notary Public

Robin M. Young (print name)

My Commission expires 06 / 20 / 2008

Inventor's Signature: \_\_\_\_\_

Jeffrey M. Roth

Jeffrey M. Roth

State/Commonwealth

of Massachusetts

County of Middlesex

Then personally appeared before me the above-named **Jeffrey M. Roth** and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 15<sup>th</sup> day of August, 2003.

(SEAL)

Robin M. Young

Notary Public

Robin M. Young (print name)

My Commission expires 06 / 20 / 2008

Inventor's Signature: \_\_\_\_\_

William E. Keicher

William E. Keicher

State/Commonwealth

of MASSACHUSETTS

County of MIDDLESEX

Then personally appeared before me the above-named **William E. Keicher** and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 15<sup>th</sup> day of August, 2003.

(SEAL)

Robin M. Young

Notary Public

Robin M. Young (print name)

My Commission expires 06 / 20 / 2008



Inventor's Signature: Alan E. DeCew

Alan E. DeCew

State/Commonwealth

of Massachusetts

County of Middlesex

Then personally appeared before me the above-named **Alan E. DeCew** and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 15<sup>th</sup> day of August 2003.

(SEAL)

Robin M. Faing  
Robin M. Faing

Notary Public

(print name)

My Commission expires 06 / 20 / 2008